



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/587,789

03/03/2008

Ezri Peleg

27275.005

6930

27887 7590 02/28/2012
FENNEMORE CRAIG
3003 NORTH CENTRAL AVENUE
SUITE 2600
PHOENIX, AZ 85012

EXAMINER

BUI, PHUONG T

ART UNIT

PAPER NUMBER

1638

MAIL DATE

DELIVERY MODE

02/28/2012

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,789	Applicant(s) PELEG ET AL.	
	Examiner PHUONG BUI	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-10,12,14-32 and 34-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-10,12,14-32 and 34-41 is/are rejected.
- 7) ☒ Claim(s) 42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Office acknowledges the receipt of Applicant's amendment filed December 29, 2011. Claims 1-3, 5, 7-10, 12, 14-32 and 34-42 are pending and are examined in the instant application. Applicant earliest priority benefit is January 29, 2004.

All previous rejections not set forth below have been withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This action is made FINAL.

The request for information under 37 CFR 1.105 filed March 1, 2011 has not been addressed. For Applicant's convenience, a copy of said request has been included with the instant Office action. This request for information must be addressed in response to the instant Office action.

Specification

3. For clarification it is suggested the sequences on p. 19 have SEQ ID NO. identifiers (SEQ ID NOs. 1 and 2).

4. The amendment filed December 29, 2011 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Table 1 does not appear to be supported by Applicant's originally filed disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

5. Claim 42 is objected to under 37 CFR 1.75(c) as being in improper form because it depends from two claims. See MPEP § 608.01(n). Accordingly, claim 42 is not been further treated on the merits.

Claim Rejections - 35 USC § 112, second paragraph

6. Claims 1-3, 5, 7-10, 12, 14-32 and 34-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, “robust”, “hardy”, “vigorous” and “deleterious traits” are relative terms lacking a comparative basis. It is unclear whether “vigorous” refers to growth or another characteristic. It is unclear how a tomato “adapted for growth on a commercial scale” differs from that not “adapted for growth on a commercial scale”. It is unclear what numerical value is “the standard error from the mean”. All subsequent recitations of these terms are also rejected.

In claim 3, “an average lycopene content of at least 200 ppm” is unclear because “average” cannot be defined as a lower limit of a range. See also claims 10 and 39.

In claim 5, “poor”, “shallow”, “brittle”, “thin”, “fragile”, “premature”, “low” and “small” are relative terms lacking a comparative basis. All subsequent recitations of these terms are also rejected.

In claim 15, “the hybrid HA3518” lacks antecedence. See also claims 29 and 30. Also, in claim 15, it is unclear what morphological and physiological characteristics are retained in the plant part. See also claim 30.

In claim 23, line 1, "part" should be amended to "parts" for proper antecedence.

In claim 28, it is unclear what plant material is in a "mixture of commercial breeding material". Also, it is unclear how commercial breeding material differs from that of non-commercial. All subsequent recitations of "mixture of commercial breeding material" are also rejected.

In claim 35, "the non-transformed tomato plant according to claim 1" lacks antecedence.

In claim 37, it is unclear whether "hybrid HA3518.38" is intended to be the same as hybrid HA3518.

In claim 38, "and" should be inserted before the last item in the Markush grouping.

In claim 40, it is suggested the recitations of "about" be deleted. The metes and bounds of "about" are unclear, and the claim recites a range within a range.

In claim 41, it is suggested "about" be deleted because the claim recites "an average", and it is unclear what range is encompassed by said average.

Clarification and/or correction is required.

Applicant traverses primarily that "robust" is an art-recognized term, cites Ruoyu Luoabc et al. (2009) as providing an acceptable definition, and states a tentative quantitative definition of robustness has been suggested (Kitano H., 2007). Applicant traverses that "deleterious traits" is an art-recognized term; these traits are listed in claim 5; Appendix I is the official guidelines administered by the Ministry of Agriculture of the State of Israel for determining deleterious traits; the declaration of Peleg

Art Unit: 1638

(Appendix II) states “deleterious traits” is an art-recognized term; and Applicant cites several references in support of Applicant’s argument.

Applicant’s traversals have been carefully considered but are deemed unpersuasive for the following reasons. Ruoyu Luoabc and Kitano cannot be considered because the references are not provided; they were published after the filing date; and the claims are not limited to the definitions provided in these references. While “robust” may be an art-recognized term, what is considered as “robust” by one skilled in the art may not be “robust” to another skilled in the art. The specification does not provide an objective, quantifiable method for determining "robust", and thus the metes and bounds of "robust" are unclear. With regard to “deleterious traits”, again, those skilled in the art would define “deleterious traits” differently; the cited references cannot be considered because they are not provided and one is post-filing; the “deleterious traits” are not limited to those set forth in claim 5; the traits set forth in claim 5 are unclear for the reasons set forth above; the specification does not define “deleterious traits” as being those set forth in the official guidelines administered by the Ministry of Agriculture of the State of Israel (Appendix I); and Appendix I does not define "deleterious traits".

Claim Rejections - 35 USC § 112, 1st paragraph

7. Claims 7, 14, 15, 26, 27, 29, 30, 34 and 37 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Since the seed claimed is essential to the claimed invention, it must be obtainable by a reproducible method set forth in the specification or otherwise be readily available to the public. If a seed is not so obtainable or available, a deposit thereof may satisfy the requirements of 35 U.S.C. 112. The specification does not disclose a reproducible process to obtain the exact same seed in each occurrence and it is not apparent if such a seed is readily available to the public. If the deposit of the seed is made under the terms of the Budapest Treaty, then an affidavit or declaration by the Applicant, or a statement by an attorney of record over his or her signature and registration number, stating the seed have been deposited under the Budapest Treaty and that the seed will be irrevocably, and without restriction or condition, released to the public upon the issuance of a patent would satisfy the deposit requirement made herein. A minimum deposit of 2500 seeds is considered sufficient in the ordinary case to assure availability through the period for which a deposit must be maintained.

If the deposit has not been made under the Budapest Treaty, then in order to certify that the deposit meets the criteria set forth in 37 CFR 1.801-1.809, Applicant may provide assurance of compliance by an affidavit or declaration, or by a statement by an attorney of record over his or her signature and registration number showing that

(a) during the pendency of the application, access to the invention will be afforded to the Commissioner upon request;

(b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;

(c) the deposit will be maintained in a public depository for a period of 30 years or

Art Unit: 1638

5 years after the last request or for the enforceable life of the patent, whichever is longer;

(d) the viability of the biological material at the time of deposit will be tested (see 37 CFR 1.807); and

(e) the deposit will be replaced if it should ever become unviable.

Applicant states Appendix III is a declaration indicating the seeds were deposited under the Budapest Treaty.

Applicant's traversal is unpersuasive because Applicant does not state the seed will be irrevocably, and without restriction or condition, released to the public upon the issuance of a patent or that Applicant intends to comply with all requirements set forth under 37 CFR 1.801-1.809. Moreover, claims 15, 29, 30 and 37 recite hybrid HA3518 without deposit information. Applicant does not teach a reproducible method of producing HA3518 or indicate that HA3518 is publicly available. One skilled in the art cannot make and use HA3518 absent a deposit without undue experimentation.

8. Claims 1-3, 5, 8-10, 12, 15-25, 28-32 and 35-41 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for deposited variety HA3518, does not reasonably provide enablement for any tomato plant which is homozygous for *dg* with 200 ppm in lycopene content and devoid of deleterious traits, methods of using said plant and progenies obtained therefrom. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention as commensurate in scope with these claims.

Claims 15, 29, 30 and 37 are included because there is no deposit information for HA3518 in these claims. The breadth of the claims encompasses any tomato plant which is homozygous for the *dg* mutation, 200 ppm lycopene content and devoid of deleterious traits associated with the *dg* mutation. The specification states that pleiotropic, undesired agronomic traits are linked to the *dg* mutation (p. 3, 8). Applicant states the prior art was unable to separate "pleiotropic, undesired traits linked to the *dg* mutation (p. 3). Applicant does not teach how to separate the desirable traits from the undesirable traits associated with the *dg* mutation. Applicant does not disclose how to obtain the claimed plant. Applicant does not teach which plants should be used in the cross to obtain the plant having the claimed characteristics. Steps (1)-(5) on pages 10-11 of the specification teach how to select for plants homozygous for the *dg* mutation, but does not teach which plants are used in the crosses, how to determine plants having "minimal pleiotropic effects", what "superior commercial varieties" were used in the crosses and how often steps (1) to (5) were repeated to obtain "best performing plants". While one skilled in the art can readily cross two different tomato plants, further guidance is necessary as to what tomato plants are to be crossed to obtain the characteristics set forth in the claims and devoid of the deleterious traits which are linked to the *dg* mutation. Since the plant homozygous for the *dg* mutation is not enabled, methods using said plant and progenies obtained therefrom are also not enabled. Accordingly, Applicant has not enabled the claimed invention as commensurate in scope with the claims without undue experimentation.

Applicant traverses primarily that the amended claims recite additional characteristics and lycopene content; the specification teaches how to produce hybrid HA3518; and the specification discloses the parent lines were developed from a cross between plants carrying the dg mutation and a mixture of germplasm from proprietary and valuable breeding material belonging to Hazera Genetics Ltd.

Applicant's traversals have been carefully considered but are deemed unpersuasive for the following reasons. Recitation of additional characteristics and lycopene does not enable the claimed invention because they do not provide guidance as to how to what plants to cross to obtain the claimed tomato variety. While the specification teaches how to make HA3518, the claims are not enabling because the claims are not limited to any particular variety which carries the dg mutation; "a mixture of germplasm from proprietary and valuable breeding material belonging to Hazera Genetics Ltd." is not a full disclosure of what plants were used in the crosses and there is no evidence of public availability of the "proprietary and valuable breeding material". Accordingly, absent a recitation and deposit of HA 3518, one skilled in the art would not be able to make and use the claimed invention without excessive burden and undue experimentation.

9. Claims 1-3, 5, 8-10, 12, 15-25, 28-32 and 35-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

Art Unit: 1638

inventor(s), at the time the application was filed, had possession of the claimed invention.

HA3518 is a hybrid (p. 16) and thus is not homozygous at every allele. HA3518 is not representative of the genus of tomato varieties claimed. There is inadequate written description provided for other alleles of the tomato varieties claimed. While the hybrid HA3518 has the homozygous *dg* mutation, 200 ppm lycopene content and "devoid of deleterious traits" which are undefined, one skilled in the art cannot reliably predict the genetic makeup or morphological and physiological characteristics of other tomato varieties based upon the disclosure of HA3518. The *dg* gene is not representative of other tomato genes. Applicant does not adequately disclose the physiological and morphological characteristics of the claimed variety. Claims reciting HA3518 without a deposit are included because the specification does not adequately describe the physiological and morphological characteristics of HA3518 absent a deposit. Thus, Applicant is not in possession of the genus of tomato varieties claimed. Claims 15-27, 29, 30, 37 and 38 are drawn to F1 progenies of hybrid HA3518. Claims 31 and 36 are drawn to F2 progenies of hybrid HA3518. While F1 progenies of an inbred plant would have the same allele at every locus as the inbred parent, F1 progenies of hybrid HA3518 would not, because it is unpredictable which allele of the parent hybrid would be inherited. The claims do not require progenies of HA3518 to retain all the morphological and physiological characteristics of the hybrid parent HA3518. Applicant has not adequately described F1 or F2 progenies of hybrid HA3518. The claims are drawn to progeny plants having undisclosed identifying characteristics

Art Unit: 1638

whereby only one parent in the first cross is partially identified, and none of the parents in the subsequent cross is known. No information is given with regard to the second parent in the first or subsequent crosses. If the claimed F1 plant cannot be identified by any of the characteristics of the HA3518 parent, then it is not possible to determine what characteristics F2 progeny would possess. There are insufficient relevant identifying characteristics to allow one skilled in the art to predictably determine the genomic structure or phenotypic characteristics of the claimed progenies, absent further guidance. Methods of using the plant also lack written description because the starting material is not adequately described, and the steps do not recite what traits or characteristics are being selected for in the progeny plants.

Claim 37 recites at least one single gene conversion anywhere in the plant genome and conferring any trait(s). The specification does not describe any single gene conversion encompassed by the claims. The specification does not describe the structure(s) of any such single gene conversion. The breadth of the claim encompasses a plant whereby every gene has been converted. There are insufficient relevant identifying characteristics to allow one skilled in the art to predictably determine such single gene conversion. Given the breadth of the claims and lack of guidance of the specification, the specification fails to provide an adequate written description of the plant as encompassed by the claim.

Accordingly, the claimed invention lacks adequate written description under current written description guidelines.

Applicant traverses primarily that HA3518 is representative of the varieties claimed; the claims recite a robust, hardy, vigorous tomato variety adapted for growth on a commercial scale homozygous for the dg mutation and an average lycopene content of at least 200 ppm; HA3518 was produced by crossing plants carrying the dg mutation with a mixture of germplasm from proprietary and valuable breeding material belonging to Hazera Genetics Ltd. as set forth in steps 1-5 and Examples 1-3; fruit yield, Brix and pH are disclosed and compared with commercial varieties; F1 and F2 have essentially all the physiological and morphological characteristics of the hybrid parent HA3518; and single trait conversion refers to incorporation of new single gene into a parent line wherein essentially all of the desired physiological and morphological characteristics of the parent lines are recovered in addition to the single gene transferred.

Applicant's traversals have been carefully considered but are deemed unpersuasive for the following reasons. Stating that HA3518 is representative of the claimed varieties is a conclusory statement and is not evidence. The recitations of robust, hardy, vigorous and adapted for growth on a commercial scale do not adequately describe the claimed tomato varieties because they are vague and indefinite for the reasons set forth above. The morphological and physiological characteristics disclosed for HA3518 are not necessarily the same as those of the claimed varieties, as the claims are not limited to HA3518. Moreover, absent a deposit recitation, the characteristics disclosed for HA3518 do not adequately describe HA3518, as evidenced by the prior art rejections below. The parents for HA3518 are undisclosed. Because

Art Unit: 1638

HA3518 is not adequately described, progenies of HA3518 cannot be adequately described, as the other parent in subsequent crosses is unknown. Because the physiological and morphological characteristics of HA3518 as set forth in the claims do not sufficiently describe the claimed varieties, a single gene conversion whereby *essentially* all of the desired physiological and morphological characteristics of the parent lines are retained do not sufficiently describe the claimed invention.

Claim Rejections - 35 USC § 102 and 103

10. Claims 1-3, 5, 8-10, 12, 15-17, 24, 25, 28-32, 36, 37 and 39-41 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Levin et al. (WO 03/057917, published July 17, 2003). Levin teaches a tomato variety homozygous for the *dg* mutation with "significantly elevated levels of ...lycopene", whereby the *dg* mutation was "introgressed into several commercial processing and fresh-market tomato cultivars that are currently marketed as Lycopene Rich Tomatoes (LRT)" (p. 2). Levin states "Red-ripe fruit of the *dg* mutants are significantly more crack resistant and therefore of higher quality" (p. 3). The plant of Levin appears to be a stable parent line and hybrid, devoid of "deleterious traits" which are undefined, and "at least 200 ppm plus or minus the standard error from the mean" (Tables 1 and 4). Levin is silent with regard to the crop yield and fruit Brix value, but these values are either inherent in the variety of Levin or encompassed by the "about" recitations in these claims. Levin also teaches seed (p. 6), F1 and F2 generation plants (pp. 7-8, Examples), methods for using the *dg*-mutated plant in crosses (pp. 7-8), pollen, ovule and tissue culture which are inherent in the claimed plants. It should be

Art Unit: 1638

noted that F2 generation plants and plants comprising a single trait conversion read on any tomato plant, because the claimed plants are not required to retain the *dg* allele or any of the morphological and physiological characteristics of the parent hybrid. There are insufficient identifying characteristics set forth in the claims to distinguish the claimed plants from those of the prior art. Only one parent in the first cross is partially characterized. The second parent in the first cross and both parents in the second cross are unknown. The claims do not specifically recite a plant whereby the plants are homozygous for the *dg* mutation and retain all of the physiological and morphological characteristics of the deposited line. Accordingly, the claimed invention is anticipated by, or in the alternative, is obvious in view of the prior art. See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejected over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products. Since the Patent Office does not have the facilities to examine and compare the plant of Applicant's with that of the prior art, the burden of proof is upon the Applicant to show an unobvious distinction between the claimed plant and the plant of the prior art. See *In re Best*, 562F.2d 1252, 195 USPQ 430 (CCPA 1977).

Applicant traverses primarily that the claims have been amended to recite robust, hardy, vigorous and adapted for growth on a commercial scale, homozygous for the *dg* mutation, lycopene content of at least 200 ppm and absence of deleterious traits; Appendix IV shows the superiority of the claimed tomato variety over the homozygous *dg* mutant LRT 915 of Levin; Levin does not teach a break of the known linkage

Art Unit: 1638

between the *dg* mutation and the undesired pleiotropic traits; and HA3518 is superior in yield and lycopene content than the LRT 915 of Levin.

Applicant's traversals have been carefully considered but are deemed unpersuasive for the following reasons. The terms robust, hardy, vigorous, adapted for growth on a commercial scale and absent of deleterious traits are vague and indefinite, and thus do not differentiate the claimed invention from the prior art. Appendix IV fails to persuade because the claims are not limited to the deposited HA3518 and thus would encompass the varieties of Levin. The claims do not require a break of the linkage between the *dg* mutation and the undesired pleiotropic traits, however such traits are defined. With regard to the yields and lycopene content of HA3518, Applicant is arguing limitations not present in the claims because the claims are not limited to the deposited HA3518, the "about" recitations would encompass the yields of Levin, crop yields are controlled by many variables including environmental factors and the yield of Levin appears to be within the standard error range.

11. Claims 31 and 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over (Hoogstraten, J. (USPN 6414226). The claims are drawn to the F2 generation progeny plants and plants comprising a single trait conversion. The claimed plants are not required to retain the *dg* allele or any of the morphological and physiological characteristics of the parent hybrid HA3518. The prior art teaches a tomato plant, seed and a tomato plant containing a single trait conversion conferring male sterility (see claim 29). There are insufficient identifying characteristics set forth in the claims to distinguish the claimed

Art Unit: 1638

plants from those of the prior art. Both parents in the second cross are unknown. The claims do not specifically recite a plant whereby the plants are homozygous for the *dg* mutation and retain all of the physiological and morphological characteristics of the deposited line. Accordingly, the claimed invention is anticipated by, or in the alternative, is obvious in view of the prior art. See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejected over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products. Since the Patent Office does not have the facilities to examine and compare the plant of Applicant's with that of the prior art, the burden of proof is upon the Applicant to show an unobvious distinction between the claimed plant and the plant of the prior art. See *In re Best*, 562F.2d 1252, 195 USPQ 430 (CCPA 1977).

Applicant traverses primarily that Hoogstraten does not teach all of the physiological and morphological characteristics of the deposited HA3518.

Applicant's traversal is unpersuasive because not all claims recite all of the physiological and morphological characteristics of HA3518, and in claim 37, HA3518 is not deposited. The morphological and physiological characteristics disclosed for HA3518 appear to be the same as those of the prior art, absent a deposit.

12. Claims 1-3, 5, 8-10, 12, 15-25, 28-32 and 35-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levin et al. (WO 03/057917, published July 17, 2003), as applied to claims 1-5, 8-12, 15-17, 24, 25, 28-32, 36 and 37 above and further in view of Hoogstraten, J. (USPN 6414226).

The teachings of Levin have been discussed supra.

Levin does not teach inclusion of an additional trait or gene.

Hoogstraten teaches introduction and expression of a transgene to confer additional traits into a tomato plant by genetic transformation or crossing, whereby the traits include herbicide resistance and disease resistance, and the transgene is operably linked to a regulatory element such as a promoter (claim 24). Hoogstraten also teaches a single trait conversion (claim 29).

It would have been *prima facie* obvious to one skilled in the art at the time the invention was made to introduce additional genes into the plant of Levin for the purpose of conferring additional desirable traits or properties such as herbicide and disease resistance by known methods such as crossing, transformation or single trait conversion as taught by Hoogstraten. One skilled in the art would have been motivated to do so with a reasonable expectation of success.

Applicant traverses as stated above for Levin and Hoogstraten.

This rejection is maintained for the reasons set forth above.

Conclusion

13. No claim is allowed.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communications from the Examiner should be directed to Phuong Bui, whose telephone number 571-272-0793.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached at 571-272-0975.

The fax phone number for the organization where this application or proceeding is assigned, for sending official correspondence, is 571-273-8300.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet.

The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Art Unit: 1638

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/Phuong T. Bui/
Primary Examiner, Art Unit 1638

ATTACHMENT TO OFFICE ACTION

Request for Information under 37 CFR § 1.105

1. Applicant and the assignee of this application are required under 37 CFR § 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

2. This request is being made for the following reasons:

Applicant is claiming variety HA3518, but the instant specification is silent about what starting materials and methods were used to produce plant variety HA3518. The information provided on page 10 is insufficient. The requested information is required to make a meaningful and complete search of the prior art.

3. In response to this requirement, if known, please provide answers to each of the following interrogatories eliciting factual information:

(i) Please supply the breeding methodology and history regarding the development of the instant variety.

a) Such information should include all of the public or commercial designations/denominations used for the original parental lines.

b) Information pertaining to the public availability of the original parental lines should be set forth.

c) The breeding method used should be set forth, such as whether single seed descent, bulk method, backcross method, or some other method was used.

d) The filial generation in which the instant plant was chosen should be set forth.

e) Information pertaining to the homozygosity or heterozygosity of the parents as well as the instant plant should be set forth.

f) Are there any patent applications or patents in which sibs or parents of the instant plant are claimed? If so, please set forth serial numbers and names of the sibs or parents.

4. If Applicant views any or all of the above requested information as a Trade Secret, then Applicant should follow the guidance of MPEP § 724.02 when submitting the requested information.

5. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure. Please indicate where the relevant information can be found.

6. The fee and certification requirements of 37 CFR § 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR § 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR § 1.105 are subject to the fee and certification requirements of 37 CFR § 1.97 if submitted subsequent to a first Office action on the merits.

Art Unit: 1638

7. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR § 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Bui whose telephone number is (571)272-07930793.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Anne Marie Grunberg/

Supervisory Patent Examiner, Art Unit 1638